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1018 Reduction of systolic and diastolic dysfunction by retrograde coronary sinus perfusion during off-pump coronary surgery

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Retrograde coronary sinus perfusion during simulated off-pump coronary revascularization diminishes systolic stunning and diastolic dysfunction. An aortic–coronary sinus shunt is a rapid, recognized approach that can improve myocardial muscle and endothelial safety during CABG in the beating heart.

1026 Minimally invasive technology for mitral valve surgery via left thoracotomy: Experience with forty cases

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Advances in minimally invasive cardiac surgery technology are readily adaptable to a left-sided minithoracotomy approach to the mitral valve. This approach, as reported in a series of 40 patients, is a safe option in complicated reoperative mitral procedures, with acceptable perioperative morbidity and mortality.

1033 Blockade of the extracellular signal-regulated kinase pathway by U0126 attenuates neuronal damage following circulatory arrest

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We evaluated the ability of an MEK1/2-specific inhibitor (U0126) to block ERK1/2 activation and mitigate neuronal damage in piglets undergoing deep hypothermic circulatory arrest (DHCA). Blockade by U0126 significantly decreased neuronal damage following DHCA. The neuroprotection seen was accompanied by inhibition of phosphorylated ERK1/2 expression in the cerebral vascular endothelium.

1041 Angiogenic pretreatment improves the efficacy of cellular cardiomyoplasty performed with fetal cardiomyocyte implantation

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We tested the hypothesis that pretreatment of infarcted myocardium with angiogenic therapy, followed by cell transplant, would be more effective than the application of either strategy alone. Exercise tolerance was significantly prolonged in animals receiving AdVEGF prior to cell implantation compared with animals receiving AdVEGF or cells alone or those receiving AdVEGF at the time of cell implantation ($P < .001$). These functional data were consistent with improvements in infarct vascularization and implanted cell survival.

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